171278 E7 1/7/03

ENVIRON

January 7, 2003

Mr. Michael Habeck
Indiana Department of Environmental Management
Post Office Box 6015
Indianapolis, IN 46204

Re: Discharge of Treated Water to Unnamed Ditch
Enviro-Chem Superfund Site
Zionsville, Indiana

Dear Mr. Habeck:

The purpose of this letter is to request authorization from the Indiana Department of Environmental Management (IDEM) to discharge treated water currently in storage at the ECC Superfund Site to Unnamed Ditch. Approximately 80,000 gallons of water previously treated by the site's SVE system is currently stored in the approximately 150,000-gallon treated water storage tank. This water consists of a combination of water extracted by the SVE system and storm water pumped from the ECC site decontamination pad.

On December 18, 2002, Handex of Indiana collected a sample from the storage tank for analysis of parameters set forth in the February 20, 1997 Briefing Memorandum prepared by IDEM, which contains NPDES Effluent Limits (copy included as Attachment 1). The analytical results are included in Attachment 2, and indicated that no parameters exceeded the Effluent Limits. ENVIRON and the ECC Site Trustees therefore request IDEM's consent for discharge of the treated water to Unnamed Ditch.

If you have any questions concerning this request, please do not hesitate to contact us.

Sincerely,

ENVIRON International Corporation

F. Ross Jones

F. Ross Jones, P.G.
Manager

FRJ:als
C:\Client Project Files\ECC\Word\Habeck_010703.ltr.doc

Attachments

cc: Matthew Ohl – USEPA Region 5
Norman Bernstein, Esq. – N.W. Bernstein & Associates
Roy Ball – ENVIRON

740 Waukegan Road • Suite 401 • Deerfield, Illinois 60015 • Tel: (847) 444-9200 • Fax: (847) 444-9420
www.environcorp.com

ATTACHMENT 1

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live

Frank O'Bannon
Governor

Michael O'Connor
Commissioner

100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
Telephone: 317-232-8603
Environmental Helpline 1-800-451-6027

February 27, 1997

Mr. Norman Bernstein
N.W. Bernstein & Associates
2000 M Street N.W., Suite 745
Washington, D.C. 20036

Dear Mr. Bernstein:

Re: NPDES Effluent Limits for the
Enviro-Chem Superfund Site

The Indiana Department of Environmental Management, Office of Water Management (IDEM-OWM) has issued the final effluent limitations for the discharge of wastewater from the remedial action to be taken at the Enviro-Chem site. The final effluent limits and a briefing memo explaining the treatment system to be used on-site, the monitoring requirements to ensure compliance with the effluent limits, and the rationale used to determine the effluent limits are included with this letter.

If you have any questions about the enclosed information, please contact me at (317) 308-3120.

Sincerely,

Tony Likins

Tony Likins
Superfund Section

AWL/tl
Enclosure
cc: Mike McAteer, U.S. EPA Region 5
Catherine Gibbs, IDEM-OLC

cc: (w/o enclosure)
George Oliver, IDEM-OWM
Steve Roush, IDEM-OWM
Pat Carrasquero, IDEM-OER

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

INDIANAPOLIS

OFFICE MEMORANDUM

Date: February 20, 1997

To: Tony Likens
Office of Emergency Response

Thru: Steven Roush
Supervisor, NPDES Permits

From: George Oliver
NPDES Permits

Subject: Enviro-Chem, Superfund Site
Zionsville, Indiana, Boone County

The request for ARARs (Applicable or Relevant and Appropriate Requirements) effluent limitations for the above site has been reviewed and processed in accordance with applicable rules adopted under 327 IAC 5. The Briefing Memo describes the pertinent facts and the rationale for the discharge limitations and monitoring for the anticipated discharge. Also, attached is a table that identified the discharge limitations for the facility.

BRIEFING MEMO
February 1997

Environmental Conservation & Chemical
Zionsville, Indiana
Superfund Site
ARAR Effluent Limits

Site History
The company was engaged in the recovery/reclamation/brokering of primary solvents, oils and other wastes received from industrial clients. Waste products were received in drums and bulk tankers and prepared for subsequent reclamation or disposal. Reclamation processes included distillation, evaporation and fractionation to reclaim solvents and oils.

Wastewater Treatment
Four (4) flow equalization tanks containing 150,00 gallons each will be used to collect contaminated water prior to treatment or for the storage of treated wastewater for compliance monitoring prior to discharge. Wastewater treatment will consist of suspended solids settling in the influent equalization tanks, air stripping and granular activated carbon. Initially (appx. 90 days) surface water and groundwater will be treated as a result of site construction. Thereafter, wastewater from the soil vapor extraction system will be treated and is expected to be for a period one (1) to three (3) years.

Receiving Stream
The discharge is to an on-site drainage ditch (zero flow, 0.0 Q7,10) and is immediately tributary to Finley Creek and the Eagle Creek Reservoir.

Effluent Limitation Rationale
Pursuant to the Clean Water Act (CWA), the U.S. Environmental Protection Agency (EPA), or an EPA-approved State, is authorized to issue a National Pollutant Discharge Elimination System (NPDES) permits for the discharge of "pollutants" from any "point source" into "waters of the United States." CWA 301(b) requires all point sources that discharge directly to the waters of the U. S. to meet technology-based effluent limitations and State water quality standards for the discharge of pollutants. EPA has determined technology-based effluent limitations through the development of National effluent limitations guidelines for many specific categories of industries. However, national effluent guidelines have not been promulgated for wastewater discharges resulting from groundwater cleanups. Consequently, these technology-based effluent limits haves been developed on a best professional judgement (BPJ) basis in accordance with 40 CFR 125.3. BPJ is used to develop technology-based effluent limits in those cases where an effluent guideline has not been promulgated for the industry.

Technology-based, Best Available Treatment (BAT) will apply to the groundwater remediation treatment system pursuant to 327 IAC 5-5-2. Maximum Contaminant Levels (MCLs) established by the U. S. EPA Drinking Water Regulations, 40 CFR 141, May 1994, provide economically and technically feasible BAT standards of treatability for groundwater and therefore are the basis for the effluent limits.

Exceptions to BAT Treatment Technology

Vinyl Chloride & Trichloroethylene
The applicant submitted additional information supporting that the use of MCLs and the RREL Treatability Data Base is not always relevant for superfund sites because of the high variability of chemicals and concentrations along with the potentially complex wastewater matrix. As a result, the applicant requested exceptions from the use of MCL as a demonstration of BAT technology for vinyl chloride and trichloroethylene. The MCL treatability level for vinyl chloride is 0.002 mg/l and trichloroethylene is 0.005 mg/l. Based upon the above information, the effluent limits for vinyl chloride and trichloroethylene were adjusted to 0.010 mg/l each.

Naphthalene & Di-*n*-butylphthalate
Naphthalene effluent limitations of 0.059 mg/l were based upon US EPA effluent guidelines for the organic chemical industry, 40 CFR 14, to demonstrate best professional judgement (BPJ) technology. However, an exception was allowed because the above supporting information and a 0.069 mg/l effluent limit is established based upon Indiana Water Quality Criteria (IWQC). Di-*n*-butylphthalate effluent limits were not changed, as requested, because they are limited by the IWQC. These chemicals were not identified in significant concentrations in the on site monitoring wells.

Discharge Limitations

The discharge shall be limited and monitored as identified as "Final Limits" on the attached table titled "Enviro-Chem Superfund Site", dated February 20, 1997.

Monitoring Requirements

a. All parameters shall be monitored weekly, by grab sample, for the first month of operation of the wastewater treatment system. After four (4) samples following initial start up of the treatment system, monitoring shall be monthly. Any parameter that exceeds the final effluent limitations shall be monitored weekly until compliance is demonstrated by four (4) consecutive analytical results.

b. The analytical and sampling methods used shall conform to the current version of 40 CFR 136. However, different but equivalent methods are allowable if they receive the prior written approval of the State agency and the U.S. Environmental Protection Agency.

Standard Conditions

a. The pH shall not be less than 6.0 nor greater than 9.0. The pH shall be monitored as follows: Weekly

b. The discharge shall not cause excessive foam in the receiving waters. The discharge shall be essentially free of floating and settleable solids.

c. The discharge shall not contain oil or other substances in amounts sufficient to create a visible film or sheen on the receiving waters.

d. The discharge shall be free of substances that are in amounts sufficient to be unsightly or deleterious or which produce color, odor, or other conditions to such a degree as to create a nuisance.

e. The discharge shall be free of substances that are in amounts sufficient to be acutely toxic to, or to otherwise severely injure or kill aquatic life, other animals, plants or humans.

f. The discharge shall not contain any substance or combination of substances in amounts that will cause or contribute to the growth of aquatic plants or algae to such degree as to create a nuisance, be unsightly or otherwise impair the designated use.

g. Samples taken in compliance with the requirements above shall be taken at a point representative of the discharge but prior to entry into the unnamed tributary to Finley Creek.

by: George Oliver

ENVIRO-CHEM SUPER FUND SITE			Indniana Department of Environmental Management				Pg 1 of 2	
ZIONSVILLE, INDIANA, BOONE COUNTY			Office of Water					
Effluent Limits FINAL			Feb. 20, 1997					
Chemicals	PROPOSED TREATMENT	MCL's	IWQ	RREL BPJ/BAT	TECHNOLOGY TYPE	MOST STRINGENT	FINAL LIMITS	ug/l (ppb)
	ug/l	mg/l	mg/l	mg/l		mg/l	mg/l	
Volitile Organics								
1,1-Dichloroethylene	1.85	0.007	0.030(DM)	0.001(98.6%)	AirS	0.002	0.002	2
1,2-Dichloroethene	1.85	NA	NA	NA		0.002	0.002	2
Ethylbenzene	3,280	0.7	1022(DM)	0.001(90%)	AirS	0.002	0.7	700
Dichloromethane(Methylene Chl)	15.7	0.005	0.816(DM)	0.001(99.8%)	AirS/GAC	0.001	0.005	5
Tetrachloroethylene	8.85	0.005	0.145(DM)	0.001(99%)	AirS	0.001	0.005	5
Toluene	3400	1	0.478(DM)	0.001(97 & 98%)	AirS/GAC	0.001	0.48	480
1,1,1-Trichloroethane	202	NA	0.254(DM)	0.001(99%)	AirS/GAC	0.001	0.2	200
1,1,2-Trichloroethane	41.8	NA	0.662(DM)/0.006(HH)	NA	NA	0.042	0.042	42
Trichloroethylene	80.7	0.005	0.163(DM)	0.001(99.5%)	AirS	0.001	0.01	10
Vinyl Chloride	525	0.002	6617(DM)	0.001(99.9%)	AirS	0.001	0.01	10

ENVIRO-CHEM SUPER FUND SITE							Pg 2 of 2
ZIONSVILLE, INDIAN , BOONE COUNTY			Feb. 20, 1997				
Effluent Limits FINAL							
Chemicals	PROPOSED TREATMENT	MCL's	IWQ	RREL BPJ/BAT	TECHNOLOGY TYPE	MOST STRINGENT	FINAL LIMITS
	ug/l	mg/l	mg/l	mg/l		mg/l	mg/l
Semivolatile Organics							
bis(2-Ethylhexyl)phthalate	584	NA	0.591(DM)/0.360(AC)	NA	NA		0.58
di-n-Butylphthalate	3,447	NA	0.021(DM)/0.013(AC)	NA	NA	0.021	0.021
Diethylphthalate	7,076	NA	2957(DM)	NA	NA		7
1,2-Dichlorobenzene	763	NA	4.27(DM)	0.020(80%)	AirS	0.02	0.76
Naphthalene	620	NA	0.069(DM)		0.059/40CFR	0.059	0.069
Phenol	570	NA	1.0(DM)/0.569(AC)	NA	NA		0.57

ug/l (ppb)

580
21
7000
760
69
570

ATTACHMENT 2

Pace Analytical
www.pacelabs.com

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
Phone: 317.875.5894
Fax: 317.872.6189

January 03, 2003

Mr. Ray Kassab
Handex
6990 Corporate Drive
Indianapolis, IN 46278

RE: Lab Project Number: 5024347
Client Project ID: Enviro-Chem 122042.002

Dear Mr. Kassab:

Enclosed are the analytical results for sample(s) received by the laboratory on December 19, 2002. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report please feel free to contact me.

Sincerely,

Donna S. Spyker

Donna Spyker
dspyker@pacelabs.com
Project Manager

Enclosures

REPORT OF LABORATORY ANALYSIS

Pace Analytical
www.pacelabs.com

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
Phone: 317.875.5894
Fax: 317.872.6189

Lab Project Number: 5024347
Client Project ID: Enviro-Chem 122042.002

Lab Sample No: 502085467 Project Sample Number: 5024347-001 Date Collected: 12/18/02 12:30
Client Sample ID: T-4 Matrix: Water Date Received: 12/19/02 08:42

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Wet Chemistry								
pH	Method: EPA 150.1							
pH	8.38			12/19/02 10:50	KSR			
GC/MS Semivolatiles								
Semivolatile Organics	Prep/Method: EPA 3510 / EPA 8270							
Phenol	ND	ug/l	10.	12/29/02 17:35	SRS	108-95-2		
1,2-Dichlorobenzene	ND	ug/l	10.	12/29/02 17:35	SRS	95-50-1		
Naphthalene	ND	ug/l	5.0	12/29/02 17:35	SRS	91-20-3		
Diethylphthalate	ND	ug/l	10.	12/29/02 17:35	SRS	84-66-2		
Di-n-butylphthalate	ND	ug/l	10.	12/29/02 17:35	SRS	84-74-2		
bis(2-Ethylhexyl)phthalate	ND	ug/l	5.0	12/29/02 17:35	SRS	117-81-7		
Nitrobenzene-d5 (S)	86	%		12/29/02 17:35	SRS	4165-60-0		
2-Fluorobiphenyl (S)	80	%		12/29/02 17:35	SRS	321-60-8		
Terphenyl-d14 (S)	89	%		12/29/02 17:35	SRS	1718-51-0		
Phenol-d6 (S)	33	%		12/29/02 17:35	SRS	13127-88-3		
2-Fluorophenol (S)	42	%		12/29/02 17:35	SRS	367-12-4		
2,4,6-Tribromophenol (S)	71	%		12/29/02 17:35	SRS			
Date Extracted	12/21/02 16:15			12/21/02 16:15				
GC/MS Volatiles								
GC/MS VOCs by 8260	Method: EPA 8260							
Vinyl chloride	ND	ug/l	2.0	01/01/03 11:31	JEW	75-01-4		
Methylene chloride	ND	ug/l	5.0	01/01/03 11:31	JEW	75-09-2		
1,1-Dichloroethene	ND	ug/l	5.0	01/01/03 11:31	JEW	75-35-4		
1,1,1-Trichloroethane	ND	ug/l	5.0	01/01/03 11:31	JEW	71-55-6		
Trichloroethene	ND	ug/l	5.0	01/01/03 11:31	JEW	79-01-6		
Toluene	ND	ug/l	5.0	01/01/03 11:31	JEW	108-88-3		
1,1,2-Trichloroethane	ND	ug/l	5.0	01/01/03 11:31	JEW	79-00-5		
Tetrachloroethene	ND	ug/l	5.0	01/01/03 11:31	JEW	127-18-4		
Ethylbenzene	ND	ug/l	5.0	01/01/03 11:31	JEW	100-41-4		
1,2-Dichloroethene (Total)	ND	ug/l	5.0	01/01/03 11:31	JEW	540-59-0		
Dibromofluoromethane (S)	100	%		01/01/03 11:31	JEW	1868-53-7		
Toluene-d8 (S)	102	%		01/01/03 11:31	JEW	2037-26-5		
4-Bromofluorobenzene (S)	97	%		01/01/03 11:31	JEW	460-00-4		

REPORT OF LABORATORY ANALYSIS

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Indianapolis, IN 46268
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Lab Project Number: 5024347
Client Project ID: Enviro-Chem 122042.002

PARAMETER FOOTNOTES

ND	Not detected at or above adjusted reporting limit
NC	Not Calculable
J	Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit
MDL	Adjusted Method Detection Limit
(S)	Surrogate

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Lab Project Number: 5024347
Client Project ID: Enviro-Chem 122042.002

QC Batch: 45683 — Analysis Method: EPA 8270
QC Batch Method: EPA 3510 — Analysis Description: Semivolatile Organics
Associated Lab Samples: 502085467

METHOD BLANK: 502093578
Associated Lab Samples: 502085467

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Phenol	ug/l	ND	10.	
1,2-Dichlorobenzene	ug/l	ND	10.	
Naphthalene	ug/l	ND	5.0	
Diethylphthalate	ug/l	ND	10.	
Di-n-butylphthalate	ug/l	ND	10.	
bis(2-Ethylhexyl)phthalate	ug/l	ND	5.0	
Nitrobenzene-d5 (S)	%	100		
2-Fluorobiphenyl (S)	%	98		
Terphenyl-d14 (S)	%	94		
Phenol-d6 (S)	%	39		
2-Fluorophenol (S)	%	59		
2,4,6-Tribromophenol (S)	%	92		

LABORATORY CONTROL SAMPLE: 502093586

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Phenol	ug/l	100.00	47.35	47	
Nitrobenzene-d5 (S)				101	
2-Fluorobiphenyl (S)				96	
Terphenyl-d14 (S)				91	
Phenol-d6 (S)				44	
2-Fluorophenol (S)				61	
2,4,6-Tribromophenol (S)				93	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 502093594 502093602

Parameter	Units	502084924 Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	RPD	Footnotes

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QUALITY CONTROL DATA

Lab Project Number: 5024347
Client Project ID: Enviro-Chem 122042.002

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 502093594 502093602

Parameter	Units	502084924 Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	RPD	Footnotes
Phenol	ug/l	0	200.00	136.6	134.1	68	67	2	1,1
Nitrobenzene-d5 (S)						95	89		
2-Fluorobiphenyl (S)						91	89		
Terphenyl-d14 (S)						95	93		
Phenol-d6 (S)						64	61		1,1
2-Fluorophenol (S)						72	72		
2,4,6-Tribromophenol (S)						88	87		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Lab Project Number: 5024347
Client Project ID: Enviro-Chem 122042.002

QC Batch: 46067 — Analysis Method: EPA 8260
QC Batch Method: EPA 8260 — Analysis Description: GC/MS VOCs by 8260
Associated Lab Samples: 502085467

METHOD BLANK: 502109846
Associated Lab Samples: 502085467

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Vinyl chloride	ug/l	ND	2.0	
Methylene chloride	ug/l	ND	5.0	
1,1-Dichloroethene	ug/l	ND	5.0	
1,1,1-Trichloroethane	ug/l	ND	5.0	
Trichloroethene	ug/l	ND	5.0	
Toluene	ug/l	ND	5.0	
1,1,2-Trichloroethane	ug/l	ND	5.0	
Tetrachloroethene	ug/l	ND	5.0	
Ethylbenzene	ug/l	ND	5.0	
Dibromofluoromethane (S)	%	96		
Toluene-d8 (S)	%	104		
4-Bromofluorobenzene (S)	%	99		

LABORATORY CONTROL SAMPLE: 502109853

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Vinyl chloride	ug/l	50.00	50.09	100	
Methylene chloride	ug/l	50.00	48.25	96	
1,1-Dichloroethene	ug/l	50.00	51.34	103	
1,1,1-Trichloroethane	ug/l	50.00	50.36	101	
Trichloroethene	ug/l	50.00	47.39	95	
Toluene	ug/l	50.00	48.20	96	
1,1,2-Trichloroethane	ug/l	50.00	44.61	89	
Tetrachloroethene	ug/l	50.00	38.88	78	
Ethylbenzene	ug/l	50.00	50.67	101	
Dibromofluoromethane (S)				101	
Toluene-d8 (S)				102	
4-Bromofluorobenzene (S)				102	

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QUALITY CONTROL DATA

Lab Project Number: 5024347
Client Project ID: Enviro-Chem 122042.002

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 502109861 502109879

Parameter	Units	502097157 Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	RPD	Footnotes
1,1-Dichloroethene	ug/l	0	50.00	28.85	31.70	58	63	9	
Trichloroethene	ug/l	0	50.00	11.55	12.22	23	24	6	
Toluene	ug/l	0.5103	50.00	8.271	9.067	16	17	9	
Dibromofluoromethane (S)						103	101		
Toluene-d8 (S)						100	103		
4-Bromofluorobenzene (S)						99	101		2,2

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QUALITY CONTROL DATA

Lab Project Number: 5024347
Client Project ID: Enviro-Chem 122042.002

QC Batch: 45584 — Analysis Method: EPA 150.1
QC Batch Method: EPA 150.1 — Analysis Description: pH
Associated Lab Samples: 502085467

SAMPLE DUPLICATE: 502086614

Parameter	Units	502085467 Result	DUP Result	RPD	Footnotes
pH		8.380	8.410	0	

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Lab Project Number: 5024347
Client Project ID: Enviro-Chem 122042.002

QUALITY CONTROL DATA PARAMETER FOOTNOTES

Consistent with EPA guidelines, unrounded concentrations are displayed and have been used to calculate % Rec and RPD values.

LCS(D)	Laboratory Control Sample (Duplicate)
MS(D)	Matrix Spike (Duplicate)
DUP	Sample Duplicate
ND	Not detected at or above adjusted reporting limit
NC	Not Calculable
J	Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit
MDL	Adjusted Method Detection Limit
RPD	Relative Percent Difference
(S)	Surrogate
[1]	The reported recovery fails to meet the established criteria.
[2]	The spike recovery was outside acceptance limits for the MS and /or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.

REPORT OF LABORATORY ANALYSIS